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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,146	05/31/2007	Hiroshige Inoue	00684.519507.	4972
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EXAMINER				
READY, BRYAN				
ART UNIT		PAPER NUMBER		
2884				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/587,146

Applicant(s)

INOUE, HIROSHIGE

Examiner

Bryan P. Ready

Art Unit

2884

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2005 and 23 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-47 is/are pending in the application.
- 4a) Of the above claim(s) 31,34,39,40,46 and 47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-30,32,33,35-38 and 41-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of Papers Received (PTO-302)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :20100806/
20100420/ 20100413/ 20090812/ 20080923/ 20080730/ 20080514/ 20060920/ 20060724.

DETAILED ACTION

Election/Restrictions

1. Claims 31, 34, 39, 40, 46, and 47 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 23 September 2010.
2. Examiner notes that Applicant's reply filed 23 September 2010 identify Claims 25-30, 32-39, and 41-45 as readable on the elected species, i.e., Embodiment 1: Figure 8. However, Examiner believes Claims 34 and 39, which provide for "an accumulator" for driving, to be exclusively associated with non-elected Embodiments 2 and 3: Figures 13 and 14, respectively. Accordingly, claims 34 and 39 are withdrawn from further consideration.

Drawings

3. Figures 1, 2, 34, 35, and 36 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: col. 4, lines 7-9 should be revised to include the *document number* associated with the Japanese Laid-open Patent Application of reference.

Appropriate correction is required.

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

6. Claims 25, 29, 30, 42, and 43 are objected to because of the following informalities: Claim 25, lines 4 and 5, both reciting "said container body", lack proper antecedent basis from line 3 of Claim 25, and should be amended to recite '...said rotatable container body...'; Claims 29 and 30 both recite "said container body" which lacks proper antecedent basis from line 3 of Claim 25, and should be amended to recite '...said rotatable container body...'; Claim 42, lines 4-13, multiply recite "said container body", which lacks proper antecedent basis from line 3 of Claim 42, and should be amended to recite '...said rotatable container body...'; Claims 42 and 43, lines 12 and 11, respectively, should be amended for clarity to recite, for example, '...configured and positioned to notify of a remaining toner amount...'. Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 25-30, 32-33, 35-38, and 41-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inose (US 6,385,407) in view of Palumbo et al. (US 5,999,759).

a. Inose discloses (Abstract; Figures 1-4): a toner supply container (100) detachably mountable to an image forming apparatus (200; col. 3, lines 57-68), said toner supply container (100) comprising/ including: a container body (110) having a toner containable inner space (120, U); and a sensor (40; *see col. 7, lines 4-32; ‘...a sensor for detecting the amount of ink remaining in the storage portion may be provided in the IC unit 40...’*), or detecting device (40), integrally provided with said container body (110), configured and positioned to detect a remaining toner amount in said container body (col. 7, lines 4-32); a sending device (*including antenna 12*) configured and positioned to wirelessly send information (“non-contact” communication; see col. 2, lines 58-67, and col. 3, lines 1-4) detected by said sensor (40)/ detecting device (40) to the image forming apparatus (200); said sensor (40) and said sending device (~12) provided integrally on a common substrate (Fig. 4; col. 7, lines 4-32); said sensor (40)/ detecting device (40) provided on a peripheral surface of said container body (see Fig. 1); said sensor (40) is a pressure sensor (col. 7, lines 4-32); an energy receiving device

(including antenna 12 and resonance capacitor 14; see col. 5, lines 15-47) configured and positioned to receive driving energy for driving said sensor (40)/ detecting device (40) and said sending device (~12) from said image forming apparatus (200); an energy applying (radio energy input from reader/ writer 200) device configured and positioned to apply energy for driving said sensor (40)/ detecting device (40) and said sending device (~12); said energy receiving device (including antenna 12 and resonance capacitor 14; see col. 5, lines 15-47) optionally/ alternatively including an electrical contact portion (lead-out wires) configured and positioned to receive electric energy from the image forming apparatus (see col. 7, lines 23-32).

b. Inose differs from the instant claimed invention in not explicitly disclosing: said container body to be a *rotatable* container body; a *toner feeding device* configured and positioned to feed the toner in said rotatable container body with rotation of said rotatable container body; and a toner supply apparatus, to which said toner supply container is detachably mountable, including: a driving device configured and positioned to apply a rotational driving force to said container body; and a notification device configured and positioned to notify of a remaining toner amount detected by said sensor with rotation of said rotatable container body; and said notification device including a display device configured and positioned to display the remaining toner amount in said toner supply container.

- c. Palumbo et al. (US 5,999,759) disclose (Abstract; Figures 1-2): a rotatable (*see arrow 54*) toner container body (23); a toner feeding device (including element 52) configured and positioned to feed a toner in said rotatable container body (23) with rotation of said rotatable container body (see col. 4, lines 22-34); and a toner supply apparatus (see Fig. 2), to which toner container body (23) is detachably mountable (Abstract; lines 1-2), including: a driving device (including element 52) configured and positioned to apply a rotational driving force (in direction of arrow 54) to said toner container body (23); and a notification device configured and positioned to notify of a remaining toner amount (see Abstract, lines 11-17); and said notification device including a display device configured and positioned to display the remaining toner amount in said toner supply container (see Abstract, lines 11-17).
- d. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to utilize the broad toner-remaining-amount detection and communication techniques of Inose in a conventional rotatable toner container, employing a conventional toner feeding/ driving device, and toner remaining amount display notification, as disclosed by Palumbo et al., as such a combination of the prior art merely applies a known technique to a known device ready for improvement to yield predictable results, namely a conventional rotatable toner supply container and toner remaining amount display notification benefiting from the use of wireless integrated circuits capable of singly performing a plurality of discrete functions.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- ❖ Richards et al. (US 6,351,621) disclose a wireless interaction with a memory of a replaceable module for office equipment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan P. Ready whose telephone number is (571) 272-9018. The examiner can normally be reached on Mon.-Fri., 9:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David P. Porta/

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BPR